Victor Graphics

Maryland Technology Extension Service

Victor Graphics Employs P2 Interns To Aid In Waste Reduction Initiative

Client Profile:
Victor Graphics is a book manufacturer located in Baltimore, Maryland. The company specializes in printing educational books for book publishers, educational institutions, and trade and professional associations. Founded in 1983, the company has been at is present location since 1995, and employs 200 people.

Situation:
Victor Graphics employed a reverse osmosis (R/O) unit--a known producer of waste water--on its line. When the Maryland Department of the Environment was awarded a Pollution Prevention Incentive for States (PPIS) grant from the Environmental Protection Agency to fund waste minimization assessments of local industries, it asked the Maryland Technology Extension Service (MTES), a NIST MEP network affiliate, to identify potential participants. MTES has worked with Victor Graphics in the past, and suggested the program as a cost effective way to address the company's waste water issue. Victor Graphics agreed to volunteer.

Solution:
Working in conjunction with the University of Maryland, MTES hired students under the pollution prevention (P2) internship program to perform the grant tasks. The student interns in this program spent ten hours per week during their spring semester learning about pollution prevention and gathering case studies, data, and techniques that related to P2 in their assigned industry (in this case, the lithographic printing industry). MTES and faculty in the Civil and Environmental Engineering Department of the University of Maryland provided guidance to the interns. When the summer semester began, the interns worked full-time gathering data at the company, researching alternatives and solutions, and evaluating the potential costs of implementing various recommendations.
With MTES supervision, interns held discussions with Victor Graphic's management team that highlighted several issues of concern. They spent significant time analyzing and investigating the company's uses of the R/O treated water, identifying root causes of the problems, and developing remedies to achieve waste minimization and pollution prevention. Finally, the interns prepared a complete report detailing P2 assessment findings and recommendations, which they presented to Victor Graphics.

The final report determined that the incoming water was of sufficient quality for Victor Graphic's production uses, and that there was no need for the R/O unit. Based on these findings, the company eliminated the R/O unit with no adverse effects. The company is now saving the costs associated with using and maintaining this equipment, and is also saving water.

Results:
Eliminated costly, redundant equipment.
Saving approximately 370 cubic feet of water per day, or $500 per quarter.
Saving approximately $100 per month in energy costs.
Eliminated associated maintenance and service costs, an estimated savings of $6,000 per year.
Avoided $25,000 in equipment replacement costs.

Testimonial:
“The Maryland Technology Extension Service's P2 intern program was a great opportunity for us and yielded significant results.”
David Gischel, Vice President